

Appl. No. 10/605,513
Amtd. dated March 17, 2005
Reply to Office action of November 17, 2004

REMARKS/ARGUMENTS

1. Objection to drawings under 37 CFR 1.83(b) due to incompleteness.

Examiner has objected to the drawings under 37 CFR 1.83(b) due to incompleteness. Examiner cites a limitation in claim 15 regarding a first conductivity type cladding layer, and 5 states that said layer is not shown in Fig.2. Examiner notes that said layer is defined as 16 in Fig.1 and as 46 in Fig.2 as per paragraph [0018].

Applicants note that paragraph 18 listed the reference numbers of Fig.1 and only stated that the reference numbers in Fig.2 correspond. Applicants believe the drawing is correct but that the specification needs clarification to show which reference numbers refer to 10 which layers. Applicants have amended paragraph [0018] of the specification accordingly for clarification. No new matter has been introduced.

2. Amendments to the specification.

Paragraph [0009] has been amended to correct an omission. This amendment is 15 fully supported in paragraph [0018], as the p-type cladding layer is mentioned there already as corresponding to the p-type cladding layer 20 of the first embodiment. No new matter has been added.

Paragraph [0018] is amended to clarify the reference numbers for Fig.2. No new matter has been introduced.

20 Paragraphs [0010], [0015], [0016], and [0020] have been amended to amend the terms n-type and p-type carriers to become n-type and p-type dopants. After the amendment of these paragraphs, the terminology used in the specification is now consistent with that used in the claims. No new matter has been introduced. Acceptance

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of the amended specification is respectfully requested.

3. Rejection of claims 1, 3, and 4 under 35 USC 102(b) over Chen et al. (6,207,972).

Examiner has rejected claims 1, 3, and 4 under 35 USC 102(b) as being anticipated by Chen et al (USPAT 6,207,972). Examiner notes that Chen et al. (hereinafter Chen) teaches a LED comprising a substrate, a light emitting stacked structure, a dual dopant contact layer, and a transparent conductive oxide layer. Examiner states: that Chen's layers 30 (3a/3b/3c) correspond to Applicants' "light emitting stacked structure" of claim 1; that Chen's layer 6a corresponds to Applicants' "dual dopant contact layer" of claim 1; and that Chen's layer 6b corresponds to Applicants' "transparent conductive oxide layer" of claim 1.

Claim 1 has been amended to overcome this rejection. Claim 1 now contains the limitations of "A nitride based light emitting diode (LED)" and "a nitride based dual dopant contact layer formed over the light emitting stacked structure". These and all other amendments are fully supported by the specification and the figures. No new matter is added.

Chen teaches the transition layer 6a formed over the AlGaN_xP_{1-x} material based LED (col.5, lines 50-55). However, Chen does not teach that the transition layer 6a is formed on a nitride material (AlInGaN) based LED. Accordingly, claim 1 has been amended to patentably distinguish claim 1 from the cited prior art references.

Thus, claim 1 should be allowed over Chen. Claims 3 and 4 are dependent on claim 1, and should be allowed if claim 1 is found allowable. Reconsideration of claims 1, 3, and 4 is respectfully requested.

4. Rejection of claims 5 and 8-11 under 35 USC 103(a) over Furukawa (5,981,977) in view of Chen.

Examiner has rejected claims 5 and 8-11 under 35 USC 103(a) over Furukawa et

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al (5,981,977) in view of Chen.

Claim 5 is now amended to be dependent on claim 1. Claims 5 and 8-11 are dependent on amended claim 1, and should be allowed if claim 1 is allowed. Reconsideration of claims 5 and 8-11 is respectfully requested.

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5. Rejection of claim 7 under 35 USC 103(a) over Funukawa and Chen in view of Wong et al (Compound Semiconductor Magazine, March 2001)

Claim 7 is dependent upon claim 5, and should be allowed if claim 5 is found allowable. Reconsideration of claim 7 is requested.

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6. Rejection of claims 12 and 14-18 under 35 USC 103(a) over Yuasa et al (6,586,777) in view of Chen.

Claims 12-18 have been cancelled, and are no longer in need of consideration.

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7. Introduction to new claim 19:

New claim 19 contains limitations found in paragraph 0019 of the specification. No new matter has been added through this new claim or through any amendments to existing claims.

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In light of the above remarks and amendments to the claims the applicant submits that all of the claims are patentably distinct from the cited prior art references. Reconsideration of all claims is requested, and applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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Respectfully submitted,

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Date: March 17, 2005

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10 Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan).